

mutation testing. (1) testing methodology in which two or more program mutations are executed using the same test cases to evaluate the ability of the test cases to detect differences in the mutations (*ISO/IEC/IEEE 24765:2017 Systems and software engineering-Vocabulary*)

program mutation. (1) computer program that has been purposely altered from the intended version to evaluate the ability of test cases to detect the alteration (*ISO/IEC/IEEE 24765:2017 Systems and software engineering-Vocabulary*)

See also: mutation testing

back-to-back testing. (1) testing in which two or more variants of a program are executed with the same inputs, the outputs are compared, and errors are analyzed in case of discrepancies (*ISO/IEC TR 19759:2016 Software Engineering - Guide to the Software Engineering Body of Knowledge (SWEBOK), 4.2.2.9*) **(2)** approach to testing whereby an alternative version of the system is used to generate expected results for comparison from the same test inputs (*ISO/IEC/IEEE 29119-1:2022, Software and systems engineering--Software testing--Part 1: General concepts, 3.10*) Syn: differential testing See also: mutation testing

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